Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Allocation of Spectrum in the 5 GHz Band	)	RM-8653
To Establish a Wireless Component of the	)	
National Information Infrastructure	)	

JOINT COMMENTS OF THE EDUCATION ORGANIZATIONS

The undersigned organizations (collectively, the "Education Organizations") strongly support for Apple Computer, Inc.'s ("Apple") NII Band Petition for Rulemaking, and urge the FCC to take action to make this proposal a reality.

The Education Organizations have a strong interest in assuring that developments in telecommunications policy and in the underlying telecommunications infrastructure adequately address the needs of students and educators. Schools, colleges, and universities *must* have access to advanced communications and computing technologies if they are to prepare students to participate fully in, and contribute to, today's information-based economy. All Americans share an interest in achieving this goal: it is necessary both to protect the economic strength of the United States, as well as to create a fair society that provides equal opportunities to all its citizens.

Access to communications and computing technologies must be available without regard to geography, income level, school size, or educational level, and must be capable of satisfying a range of learning needs. In particular, schools and universities will require technologies that are broadband (capable of supporting, for example, videoconferencing and multimedia applications), flexible (capable of being used efficiently to maximize the benefits of limited resources),

and affordable (capable of being installed and used with the limited funds available).

If our society's educational needs are ever to be fulfilled, new options must be explored. Subsidies alone will not be adequate; better, more cost-effective solutions for some types of applications and users also must be developed. The Apple Petition offers important benefits to America's schools. For example, Apple's proposed NII Band:

- Would offer schools the option of using wireless connections. With the NII Band, schools would not have to rely on physical wires to connect them to each other, to the Internet, or to other information resources. As a result, they could create new networks at substantially lower costs; could connect devices to each other and to the Internet even where asbestos in the walls or other infrastructure problems make it impossible or impracticable to install wires and cables; and could create a "network" where every computer could be moved around (for example, to a different classroom, on a field trip, or to a teacher or student's home) without losing the ability to communicate with other devices and other networks.

- Would give schools control. Schools would not have to wait for a service provider to install a network in their area; rather, an individual school, school district, college or university could purchase equipment and install its own "network," designed to meet its particular needs. This could be a simple as two computers capable of exchanging information with one another on an *ad hoc* basis, or as expansive as a high-bandwidth, community-wide network linking all the schools in a district with the local library system, with local government buildings, or with the broader telecommunications infrastructure.

- Would be available in all areas of the country. Because users would be in control, the NII Band would provide communications opportunities to those whose needs may not be met by more traditional service providers. The NII Band would be particularly important for schools and universities in rural areas, who may not see advanced networks being built in their area in the near future, or at all. It will also be important for institutions in high-growth areas, where demand for

communications facilities likely will outpace service providers' ability to construct adequate new facilities.

- Would be a public resource, available without charge to users. Educators are working to obtain low cost access to telecommunications networks, and are gratified that the telecommunications reform bill recently passed by the United States Senate would help to assure such access. Such access, however, will be only part of the solution. Even with a discount, many services provided over traditional wired and wireless networks will be prohibitively expensive, especially for schools seeking high-capacity connections, and may be subject to future rate increases. In contrast, unlicensed wireless spectrum is available without charge to those who purchase the necessary equipment. In addition to saving on service fees, the NII Band thus provides schools with significantly greater budgeting certainty by freeing them from the threat of future rate increases.

- The NII Band would support higher capacity and longer distance communications. The Education Organizations were pleased by the FCC's recent decision creating "Data-PCS," a new unlicensed wireless service that will permit low cost wireless communications at speeds of up to approximately 10 Mbps. In the coming years, however, educators and students will also need higher speed connections, and they will want to communicate over longer distances (for example, from building-to-building or across an entire campus, rather than just from classroom-to-classroom). The NII Band will build upon the Data-PCS allocation, making these new applications possible on an unlicensed, wireless basis.

- The NII Band will be open to all manufacturers. Any manufacturer would be able to sell NII Band devices (as long as the devices conform to some basic "rules of the road" designed to protect equitable access to the shared spectrum resource). This will give schools needed flexibility in working with a variety of manufacturers to develop affordable solutions and to build public-private partnerships to bring computing and communicating resources into schools and classrooms.

In light of these benefits, the Education Organizations urge the FCC to act promptly to make Apple's proposal a reality. The radio

spectrum is a public resource, and a portion of it should be reserved for public use on an open, equitable basis.

Respectfully submitted,

/s/ Gerald E. Stroufe
Gerald E. Stroufe
Director of Governmental and Professional Liaison
The American Educational Research Association
1230 Seventeenth Street, N.W.
Washington, D.C. 20036
(202) 223-9485

/s/ David Byer
David Byer
Education Policy Manager
Software Publishers Association
1730 M Street, N.W., Suite 700
Washington, D.C. 20036
(202) 452-1600

/s/ Walt Purdy
Walt Purdy
Executive Director
Gary G. Allen
Director of Governmental Affairs
Triangle Coalition for Science and Technology Education
5112 Berwyn Road, Third Floor
College Park, MD 20740
(301) 220-0870

/s/ Thomas A. Shannon

Thomas A. Shannon
Executive Director
National School Boards
Association
1680 Duke Street
Alexandria, Virginia 22314
(703) 838-6208